INSTALLING PULLEYSHAFT SEALS ON A JCSS-PRODUCED GEARBOX
SAFETY

J.C. Steele and Sons equipment is designed to process large amounts of heavy products. To accomplish many of the required operations of our customers, high horsepower and heavy components are required. A great deal of time and effort has been invested into our equipment to make them as safe as practically possible. The safety features are no substitute of caution and common sense. A careless moment is all that is needed to cause a serious accident. Please refer to the machine’s Owner’s Manual for a detailed list of safety precautions.

GENERAL DESCRIPTION

This Technical Service Bulletin outlines the procedure to install the pulley shaft seals on the 90BDPS, 75ADEX, 75ADC, and 75ADPS, although all the diagrams utilize the 90BDPS model. To combat a reoccurring leak emanating from the input shaft of the machines using the double reduction gearbox, several modifications to the existing seal set must be performed.
SPECIAL TOOLS NEEDED

- Round file or die grinder
- Loctite 545 removable pipe sealant
- Silicone sealant
- Lifting device

MANPOWER ESTIMATE

This procedure will require 2 people for 4 hours, depending on ease of access.

PROCEDURE

1. Remove the **clutch** and the **hub**.

2. Remove the **sleeve (21W)**.
3. Disconnect the oil line.
4. Remove the bearing cap (13X).

5. Remove the oil line that supplied the cap.
6. Remove the old seals from the cap.

7. Using a round file or a die grinder, make a notch about ½" wide and ¼" deep in the small bore. Place the notch in line with the oil inlet hole.
8. Repeat Step 7 about 180° from the first notch.
9. Carefully clean out the bearing cap (13X). Be sure to remove all the chips, burrs, and debris from the cap, especially around the oil supply hole.

10. Press one of the new seals into the bearing cap with the lip facing the inner flange.

11. Find the thin metal ring and lay it on top of the seal that was just pressed into the bearing cap.

12. Press the second seal into the cap with the lip facing the metal ring.
   - At this time both seals should have their lips facing in the same direction toward the inner flange of the bearing cap.

13. Inspect the sleeve (21W) for any burrs especially around the spanner holes and threads. Carefully remove any burrs and thoroughly clean the sleeve.

   - This must be sealed at the threads with Loctite 545 removable pipe sealant.
   - Be sure that it solidly butts against the bearing.
   - If the spanner holes are deformed, remove any of the burrs that might cut the seals during installation.
   - Make sure that no filings can contaminate the bearing.
15. Install the bearing cap with the oil supply line on the bottom.
   - Look at the cap and the extruder and determine how you wish to run the oil line.
   - Thread the new fitting into the bearing cap turn it until it faces the desired direction.
   - Do not use any Teflon tape or string on the pipe threads.

16. Put bead of silicone sealant $\frac{3}{16}''$ to $\frac{1}{4}''$ diameter into the corner between the outer flange and the pilot of the bearing cap (13X).

17. Install the bearing cap with the oil inlet on the bottom.
   - Silicone sealant should be seen extruding from everywhere under the flange.
   - Use a diagonal tightening pattern and gradually tighten the bolts to 120 ft.-lbs. (163 Nm).

18. Install the new oil line.

19. Double check all of the fittings and bolts.